

IN THE CLAIMS:

Please amend Claims 1-11 as follows.

1. (Currently Amended) A stereoscopic photographing lens unit for enabling the reproduction on a display of information needed to properly display and view a stereoscopic image produced by said lens unit that is attached to a camera main unit having a recording medium on which picture signals representing an image formed by the stereoscopic photographing lens unit are recorded, the stereoscopic photographing lens unit having a first photographing optical axis and a second photographing optical axis and comprising:

control means for controlling a photographing optical system including said stereoscopic photographing lens unit; and

means for providing the information to the recording medium that is to be reproduced on a display and that is needed to properly display and view a stereoscopic image produced by said lens unit by transmitting the ~~predetermined~~ information of the photographing optical system, ~~that includes the information that is to be reproduced on the display~~ that is needed to properly display and view a stereoscopic image produced by said lens unit, provided by the control means, to the recording medium in the camera main unit for recordation on the same recording medium together with the picture signals in such a manner so as to permit reading out and display of the ~~transmitted predetermined~~ information with the picture signals from the recording medium during reproduction of the picture signals,

wherein the information transmitted to the recording medium by said providing means comprises at least one of:

first information regarding a focal length of the photographing optical system;
second information regarding the interval between the incident optical axes of the
first photographing optical axis and the second photographing optical axis; and
third information regarding the angle formed by the incident optical axes of the
first photographing optical axis and the second photographing optical axis to the camera main unit
in the form of digital values.

2. (Currently Amended) A stereoscopic photographing lens unit according to Claim 1,
wherein ~~said providing means transmits~~ the information transmitted by said providing means to
the recording medium comprises all of the ~~first information, regarding a focal length of the~~
~~photographing optical system, the~~ second information, regarding the interval between the incident
optical axes of the first photographing optical axis and the second photographing optical axis, and
the ~~third information regarding the angle formed by the incident optical axes of the first~~
~~photographing optical axis and the second photographing optical axis to the camera main unit in~~
~~the form of digital values.~~

3. (Currently Amended) A stereoscopic photographing lens unit according to Claim 1,
further comprising: the recording medium for storing the ~~predetermined information of the~~
~~photographing optical system.~~

4. (Currently Amended) A stereoscopic photographing lens unit according to Claim 1, wherein the stereoscopic photographing lens unit is interchangeable with respect to the camera main unit, and transmits the ~~predetermined~~ information of the photographing optical system through a mounting contact to the camera main unit.

5. (Currently Amended) A stereoscopic photographing apparatus for enabling the reproduction on a display of information needed to properly display and view a stereoscopic image produced by said apparatus that has a first photographing optical axis and a second photographing optical axis, and switches picture signals for a left eye and a right eye, respectively, for each field through the intermediary of the respective photographic optical axes before inputting an image formed by said stereoscopic photographic apparatus in the form of the picture signals for the left eye and the right eye to recording means for recordation, comprising:

a photographing optical system including the first and second photographic optical axes;

control means for controlling said photographing optical system; and

means for providing the information to the recording medium that is to be reproduced on a display and that is needed to properly display and view a stereoscopic image produced by said apparatus comprising said recording means for recording ~~predetermined~~ the information of said photographing optical system, ~~including control information provided by said control means including information that is to be reproduced on a display and that is needed to properly display and view a stereoscopic image produced by said apparatus,~~

wherein the information ~~which~~ includes information regarding whether the odd/even field of an input picture signal corresponds to the picture signal for left eye or right eye,

wherein said recording means records the information regarding whether the odd/even field of an input picture signal corresponds to the picture signal for left eye or right eye to the recording medium in the form of digital values, together with picture signals representing an image formed by said stereoscopic photographic apparatus or picture signals representing an image formed by said stereoscopic photographic apparatus and speech signals in such a manner to permit reading out of the ~~predetermined~~ information with the picture signals or the picture signals and the speech signals from the recording medium to the display during reproduction of the picture signals.

6. (Currently Amended) A stereoscopic photographing apparatus according to Claim 5, wherein the information that is to be reproduced on the display and that is needed to properly display and view a stereoscopic image produced by said apparatus, which is recorded by said recording means together with the picture signals or the picture signals and speech signals also comprises

first information regarding the focal length of the photographing optical system,

second information regarding an interval between the incident optical axes of the first photographing optical axis and the second photographing optical axis, and

third information regarding the angle formed by the incident optical axes of the first photographing optical axis and the second photographing optical axis to the recording medium, and also records fourth information, which is the information regarding the angle of view calculated from the screen size of an image pick-up device and the first information.

7. (Currently Amended) A photographing system for enabling the reproduction on a display of information needed to properly display and view a stereoscopic image produced by said system and for recording picture signals simultaneously input by a right-eye photographing apparatus and a left-eye photographing apparatus to a recording medium by switching the picture signals for each field, the picture signals respectively representing images produced by an optical system of the right-eye and left-eye photographing apparatuses, said photographing system comprising:

control means for controlling the right-eye and left-eye photographing apparatuses; and

means for providing the information to the recording medium that is to be reproduced on the display and that is needed to properly display and view the stereoscopic image produced by said system,

wherein ~~comprising recording means for recording predetermined~~ the information ~~comprises of the right-eye and left-eye photographing apparatuses, including control information provided by the control means, and~~ information regarding whether the odd/even field of an input picture signal corresponds to a picture signal for a left eye or a right eye representing an image produced by the optical system of the right-eye or the left-eye photographing apparatuses,

wherein said providing means comprises recording means for recording on to the recording medium information regarding whether the odd/even field of an input picture signal corresponds to a picture signal for a left eye or a right eye in the form of digital values, together with picture signals representing images produced by the optical system of the right-eye or the left-eye photographing apparatuses or picture signals representing an image produced by the optical system of the right-eye or the left-eye photographing apparatuses and speech signals in

such a manner as to permit reading out of the ~~predetermined~~ information with the picture signals or the picture signals and the speech signals from the recording medium to the display during reproduction of the picture signals.

8. (Currently Amended) A photographing system according to Claim 7, wherein ~~said~~ the information that is to be reproduced on the display and that is needed to properly display and view a stereoscopic image produced by said system, which is recorded by recording means together with the input picture signal also comprises

first information regarding the focal length of the photographing optical system,
second information regarding an interval between the incident optical axes of a first photographing optical axis and a second photographing optical axis, and

third information regarding the angle formed by the incident optical axes of the first photographing optical axis and the second photographing optical axis to the recording medium, and also records fourth information, which is the information regarding the angle of view calculated from the screen size of an image pick-up device and the first information.

9. (Currently Amended) A unit according to Claim 1, wherein said providing transmitting means transmits the ~~predetermined~~ information of the photographing optical system, to the recording medium in the camera main unit for recordation on the recording medium side by side with the picture signals.

10. (Currently Amended) The stereoscopic photographing apparatus according to Claim 5, wherein said recording means records the ~~predetermined~~ information side by side with the picture signals or the speech signals.

11. (Currently Amended) The photographing system according to Claim 7, wherein said recording means records the ~~predetermined~~ information side by side with the picture signals or the speech signals.